



April 7, 2000  
Project No. 97664V3

Ms. Brenda Pohlmann  
Nevada Division of Environmental Protection  
555 E. Washington, Suite 4300  
Las Vegas, NV 89101-1049

**RE:** *Results of monthly surface water sampling of the Las Vegas Wash at the Northshore Road bridge.*

PROVIDING

- Geotechnical Engineering
- Construction Materials Testing
- Environmental Site Assessments
- Drilling Services

Dear Ms. Pohlmann:

Per your request, Geotechnical & Environmental Services, Inc. (GES) obtained a surface water sample from the Las Vegas wash on March 29, 2000 near the Northshore Road Bridge. We sent this sample, under chain-of-custody protocol, to NEL Laboratories (NEL) for laboratory analysis of perchlorate. NEL's analysis revealed a perchlorate concentration of 870 micrograms per Liter ( $\mu\text{g/L}$ ). The NEL report is included with this letter, along with the Perchlorate Summary Table for 2000.

Our services were performed using that degree of care and skill ordinarily exercised under similar circumstances by reputable engineering firms in this or similar localities. No other warranty, either express or implied, is included or intended in this report. We appreciate this opportunity to provide our services. If you have any questions regarding these results, please feel free to call us at 365-1001.

Sincerely,  
**Geotechnical & Environmental Services, Inc.**

*Daniel C. Burns*

Daniel C. Burns, C.E.M.\*  
#1692 (Expires 10/07/2001)  
Project Manager

*Gregory P. DeSart*  
Gregory P. DeSart, P.E., C.E.M.  
#1172 (Expires 12/22/2000)  
President

\* "I hereby certify that I am responsible for the services described in this document and for the preparation of this document. The services described in this document have been provided in a manner consistent with the current standards of the profession and to the best of my knowledge comply with all applicable federal, state and local statutes, regulations and ordinances."

dlr

Enc: 2000 Perchlorate Summary Table  
NEL Analytical Report

Dist: 1 faxed to addressee at 486-2863  
1 original mailed to addressee  
cc: fax to Jeff Gibson, American Pacific Corporation  
cc: mail to Kevin Mayer, USEPA SFD 72, 75 Hawthorne Street, San Francisco, CA 94105  
cc: to project file 97664V3

7560 W. Sahara Ave., Suite 101 Las Vegas, NV 89117  
(702) 365-1001 • Fax (702) 341-7120  
[www.gesnevada.com](http://www.gesnevada.com)

**Las Vegas Wash at Northshore Road Bridge  
2000 Summary of Perchlorate Concentrations**

<b>Date Sampled</b>	<b>Perchlorate (µg/L)</b>
1/27/00	569
2/28/00	720
3/29/00	870

**NEL LABORATORIES**

Reno • Las Vegas  
Phoenix • So. California

Las Vegas Division  
4208 Arcata Way, Suite A • Las Vegas, NV 89030  
(702) 657-1010 • Fax: (702) 657-1577  
1-888-368-3282

CLIENT: Geotechnical & Env. Serv.  
7560 West Sahara Ave. #101  
Las Vegas, NV 89117  
ATTN: Dan Burns

PROJECT NAME: FPF/97664 V3  
PROJECT NUMBER: 97664 V3

NEL ORDER ID: L0003295

Attached are the analytical results for samples in support of the above referenced project.

Samples submitted for this project were not sampled by NEL Laboratories. Samples were received by NEL in good condition, under chain of custody on 3/29/00.

Should you have any questions or comments, please feel free to contact our Client Services department at (702) 657-1010.

  
Stan van Wageningen  
Laboratory Manager

4/6/00  
Date

CERTIFICATIONS:

	Reno	Las Vegas	S. California
Arizona	AZ0520	AZ0518	AZ0605
California	1707	2002	2264
US Army Corps of Engineers	Certified	Certified	

	Reno	Las Vegas	S. California
Idaho	Certified	Certified	
Montana	Certified	Certified	
Nevada	NV033	NV052	CA084
L.A.C.S.D.			10228

**NEL LABORATORIES**

CLIENT: Geotechnical & Env. Serv.  
PROJECT ID: FPF/97664 V3  
PROJECT #: 97664 V3

CLIENT ID: North Shore Road Bridge  
DATE SAMPLED: 3/29/00  
NEL SAMPLE ID: L0003295-01

TEST: Inorganic Non-Metals  
MATRIX: Aqueous

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Perchlorate	870	40.	10	CA DHSM - IC	µg/L	3/31/00

D.F. - Dilution Factor

ND - Not Detected

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**NEL LABORATORIES**

CLIENT: Geotechnical & Env. Serv.  
PROJECT ID: FPF/97664 V3  
PROJECT #: 97664 V3  
TEST: Non-Metals

CLIENT ID: Method Blank  
DATE SAMPLED: NA  
NEL SAMPLE ID: 000331CLO4-BLK

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>D. F.</u>	<u>METHOD</u>	<u>UNITS</u>	<u>ANALYZED</u>
Perchlorate	ND	4	1	CA DHSM - 1C	µg/L	3/31/00

D F. - Dilution Factor

ND - Not Detected

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## NEL LABORATORIES

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Phoenix • So. CaliforniaLas Vegas Division • 4208 Arcata Way, Ste. A • Las Vegas, NV 89030  
(702) 657-1010 • FAX: (702) 657-1577 • 1-866-368-3282

CES

Dan Burns

Company: 7560 W. Sahara Ave, #114  
Attention:

Address:

Las Vegas NV 89117

Phone Number:

Fax Number: 341-7120

Billing Address:

Expected Date: 4/5

Requested Turnaround: ☒ 5-day ☐ 2-day ☐ 1-day ☐ Other

Time/Date Sampled Customer Sample Identification N.E.L. Identification

3/29/00 North Star Road Bridge 01

# of Containers  
Matrix (Box #1)  
Preservative (Box #2)

Perchlorate

Analysis

Remarks

Project Name:

FPF

Project Number:

97664 V3

Purchase Order Number:

1634

Sampled By:

R. Cooke

Custody Seal intact? Y ☒ None Temp 20°C  
Condition when received good

Relinquished by (Print) (Signature) Date/Time Received by (Print) (Signature) Date/Time

Richard Cooke Richard Cooke 3/29/00 1127 Tait Foter Valti Foter 29 Mar 00 1027

3

Box #1  
DW - Drinking Water  
WW - Waste Water  
OL - Organic Liquid  
SD - Solid  
AO - Aqueous  
A - AirBox #2  
A - HCl  
B - HNO<sub>3</sub>  
C - H<sub>2</sub>SO<sub>4</sub>  
D - NaOH  
E - Ice Only  
F - Other  
G - Not Preserved

The liability of NEL Laboratories Inc. is limited strictly to the price of sample analysis for those samples received in good condition by NEL. NEL is not responsible for loss, damage, resampling costs and/or qualified data related to samples not received in good condition, including adequate sample volume and number of containers. Customer signature of this CAC constitutes a purchase order for NEL to perform work and constitutes acceptance of all NEL Standard Terms and Conditions. Signature also constitutes acceptance of NEL Standard Lab Prints for all services ordered here on, except those specified otherwise via an NEL Quotation for Testing Services in effect at the time of sample receipt. NEL turnaround times are measured in regular working days. Samples received at the laboratory after 16:30 will be considered received on the next working day. Commitment of laboratory to the requested turnaround time will be confirmed via Sample Confirmation transmitted to the fax number provided above.

## CHAIN OF CUSTODY

NEL Work Order: L0003295